

WEST Search History

DATE: Thursday, May 06, 2004

| Hide? | <u>Set Name</u> | <u>Query</u> | <u>Hit Count</u> |
|--|---------------------|---|----------------------|
| <i>DB=USPT,EPAB,DWPI; PLUR=YES; OP=ADJ</i> | | | |
| <input type="checkbox"/> | L1 | molecular break light | 1 |
| <input type="checkbox"/> | L2 | probe same (hairpin or stem loop) | 616 |
| <input type="checkbox"/> | L3 | probe same (hairpin oligonucleotide or (stem loop near oligonucleotide)) | 25 |
| <input type="checkbox"/> | L4 | L2 and fluorophore | 263 |
| <input type="checkbox"/> | L5 | L4 and quencher | 133 |
| <input type="checkbox"/> | L6 | L5 and enediyne | 1 |
| <input type="checkbox"/> | L7 | L5 and cleavage agent | 11 |
| <input type="checkbox"/> | L8 | L5 and bleomycin | 0 |
| <input type="checkbox"/> | L9 | enediyne | 156 |
| <input type="checkbox"/> | L10 | L9 and probe | 55 |
| <input type="checkbox"/> | L11 | L10 and fluorophore | 11 |
| <input type="checkbox"/> | L12 | L11 and cleav\$ | 11 |
| <input type="checkbox"/> | L13 | L7 and cleav\$ | 11 |
| <input type="checkbox"/> | L14 | molecular beacon probes | 156 |
| <input type="checkbox"/> | L15 | L14 and (bleomycin or enediyne) | 2 |
| <input type="checkbox"/> | L16 | L14 and L9 | 1 |
| <input type="checkbox"/> | L17 | L14 and (fluorophore and quencher) | 69 |
| <input type="checkbox"/> | L18 | L17 and (hairpin oligonucleotide or stem loop oligonucleotide) | 7 |
| <input type="checkbox"/> | L19 | L18 and cleav\$ | 4 |
| <i>DB=PGPB,USPT,USOC,EPAB,DWPI; PLUR=YES; OP=ADJ</i> | | | |
| <input type="checkbox"/> | L20 | L14 and cleavage agent | 5 |
| <input type="checkbox"/> | L21 | L14 and (exonuclease or restriction enzyme or restriction endonuclease or nuclease) | 113 |
| <input type="checkbox"/> | L22 | L21 and (stem loop or hairpin) | 69 |
| <input type="checkbox"/> | L23 | L22 and ((fluorophore or acceptor) and quencher) | 55 |
| <input type="checkbox"/> | L24 | L23 and solid support | 30 |
| <input type="checkbox"/> | L25 | calicheamicin | 396 |
| <input type="checkbox"/> | L26 | L25 and cleav\$ | 331 |
| <input type="checkbox"/> | L27 | L26 and L21 | 0 |
| <input type="checkbox"/> | L28 | L26 and (fluorophore and quencher) | 14 |

| | | | |
|--------------------------|-----|--|-------|
| <input type="checkbox"/> | L29 | CalC and l26 | 10 |
| <input type="checkbox"/> | L30 | L29 and l28 | 1 |
| <input type="checkbox"/> | L31 | nucleotd=ide protective agent | 0 |
| <input type="checkbox"/> | L32 | nucleotide protective agent | 2 |
| <input type="checkbox"/> | L33 | (protective agent near (nucleic acid or nucleotide)) | 2 |
| <input type="checkbox"/> | L34 | CalC or calicheamicin-resistance | 18665 |
| <input type="checkbox"/> | L35 | WO 0037608 | 0 |
| <input type="checkbox"/> | L36 | WO0037608 | 0 |
| <input type="checkbox"/> | L37 | WO 0037608 | 0 |
| <input type="checkbox"/> | L38 | WO000037608 | 0 |

END OF SEARCH HISTORY

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
|--|------------------|---------------|
| CA SUBSCRIBER PRICE | -24.95 | -24.95 |

FILE 'STNGUIDE' ENTERED AT 14:54:33 ON 06 MAY 2004
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FILE CONTAINS CURRENT INFORMATION.
 LAST RELOADED: Apr 30, 2004 (20040430/UP).

=> d his

(FILE 'HOME' ENTERED AT 14:29:49 ON 06 MAY 2004)

FILE 'MEDLINE, BIOTECHDS, EMBASE, BIOSIS, SCISEARCH, CANCERLIT, CAPLUS'
 ENTERED AT 14:30:22 ON 06 MAY 2004

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L1      2 S (MOLECULAR BREAK LIGHT) AND PROB##
L2      19 S (HAIRPIN OR STEM LOOP) AND MOLECULAR BEACON PROB##
L3      15 DUP REM L2 (4 DUPLICATES REMOVED)
L4      1 S (L3 AND (EXONUCLEASE OR NUCLEASE OR ENDONUCLEASE OR RESTRICT
L5      1 S L3 AND CLEAV?
L6      2642 S (HAIRPIN OR STEM LOOP) AND PROB##
L7      74 S L6 AND (FLUOROPHORE AND QUENCHER)
L8      48 DUP REM L7 (26 DUPLICATES REMOVED)
  
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FILE 'STNGUIDE' ENTERED AT 14:54:33 ON 06 MAY 2004

=>

Designing a novel molecular beacon for surface-immobilized
DNA hybridization studies;
a DNA **probe** with a **stem loop**
structure that emits fluorescence upon binding to a target
DNA, for use as a DNA biosensor

AUTHOR: Fang X; Liu X; Schuster S; *Tan W
CORPORATE SOURCE: Univ.Florida
LOCATION: Department of Chemistry and UF Brain Institute, University of
Florida, Gainesville, FL 32601, USA.
SOURCE: J.Am.Chem.Soc.; (1999) 121, 12, 2921-22
CODEN: JACSAT
ISSN: 0002-7863

DOCUMENT TYPE: Journal
LANGUAGE: English
AN 1999-05924 BIOTECHDS
AB A biotinylated ssDNA molecular beacon was designed for use in DNA
hybridization analysis. DNA hybridization and molecular interaction
studies are important techniques for genetic disease diagnosis,
particularly where clinical symptoms are linked to nucleic acid
mutations. Molecular beacons (MB) are a new class of DNA **probe**
, and are used to identify the mutations responsible for genetic disease.
MB are ss DNA **probes** containing a **stem loop**
structure. The loop structure is capable of reporting the presence of a
specific complementary DNA sequence, and the five bases at each end of
the MB are complementary, forming a stem. A **quencher** is
immobilized to one of the ends, and a **fluorophore** to the other,
so that the fluorescence is quenched until the loop comes into contact
with a target DNA sequence. The hybrid between loop and target DNA is
longer and more stable than the stem structure, and thus the stem is
broken, and the **fluorophore** brought out of contact with the
quencher, resulting in fluorescent emissions. This is of
significant value in studying genetics, particularly genetic disease and
molecular interaction. It can also be used to produce DNA biosensors.
(14 ref)